

CLAIM AMENDMENTS

Please change "Patent Claims" to -- We claim: -- .

1 1. (Currently Amended) A method ~~and apparatus for the~~
2 steam misting of rectangular nozzles and spinning systems equipped
3 therewith for producing polyamide filaments, ~~especially in accer-~~
4 ~~dance with the bottom loading concept, characterized in that, the~~
5 comprising the steps of:

6 feeding steam required for the steam misting initially
7 ~~flows through a tube loop lying in the carrier steam~~ a heating
8 portion of the a spinning beam in order to heat ~~it~~ the steam
9 approximately to the same temperature as the a spinning tempera-
10 ture;

11 ~~itself, then passing~~ the steam ~~being then passed through~~
12 a pressure equalizing distribution chamber ~~(14) before it and~~ then
13 ~~directly emerges on the~~ emitting the steam along an entire longi-
14 tudinal side of a rectangular nozzle stack; ~~(2)~~ and

15 finally ~~is~~ directed the steam in a uniformly distributed
16 manner in the a spinning chamber ~~(8)~~ below said spinning beam to
17 the a spinning plate thereof.

1 2. (Currently Amended) The method and ~~apparatus accord-~~
2 ~~ing to defined in claim 1 characterized in that wherein~~ the pres-
3 sure equalizing distribution chamber ~~(14)~~ is arranged respectively
4 along a single longitudinal side of each said rectangular nozzle
5 stack and is configured in a labyrinth shape and is fed only by a
6 single steam inlet ~~(19)~~ from the tube loop ~~(9)~~ centrally.

1 3. (Currently Amended) The method and ~~apparatus accord-~~
2 ~~ing to claim 1 characterized in that the defined in claim 2~~
3 wherein said pressure equalizing and ~~labyrinth-like~~ distribution
4 chambers are respectively provided on both longitudinal sides of
5 the rectangular nozzle stack.

1 4. (Currently Amended) The method and ~~apparatus accord-~~
2 ~~ing to claim 1 characterized in that defined in claim 2 wherein~~
3 the pressure equalizing and ~~labyrinth-like~~ distribution chambers
4 chamber which ~~have~~ has a single centrally oriented steam ~~inlets~~
5 ~~(14) in their simplest form each are inlet is~~ comprised of at least
6 two passages ~~(15, 16)~~ with rectangular cross sections, which are
7 open on their longitudinal sides and transition between one another
8 at right angles, whereby the a first of said passages ~~passage~~
9 ~~(15) has two to a maximum of five times greater rectangular cross~~
10 ~~sections section than the subsequent a second of said passage (16)~~
11 passages.

1 5. (Currently Amended) The method ~~and apparatus accord-~~
2 ~~ing to claim 1 characterized in that~~ defined in claim 2 wherein the
3 pressure equalizing and labyrinth-like distribution chamber (14)
4 which has a single central and horizontally oriented steam inlet
5 ~~(19) have in their simplest form each~~ has at least two passages
6 ~~(15, 16)~~ with rectangular cross sections which are open at their
7 longitudinal sides and transition between them at right angles,
8 whereby ~~the~~ a first and of said passages is larger passage (15)
9 and has an upwardly open rectangular cross section which runs into
10 ~~the~~ a right angled horizontal and very small gap of the subsequent
11 a second of said passage passages (16) which then opens with one
12 ~~of its~~ longitudinal sides into the spinning chamber and through
13 which the steam is uniformly distributed transversely to ~~the~~ a
14 filament curtain in the direction of the nozzle stack.

1 6. (Currently Amended) An apparatus for the steam
2 misting of a rectangular nozzles nozzle and a spinning systems
3 equipped therewith ~~characterized in that the~~ comprising a pressure
4 equalized and labyrinth-like distribution chambers (14) each of
5 ~~which has~~ having a single steam inlet, ~~has~~ a steam outlet bar (11)
6 ~~which in its simplest form is~~ comprised of at least two bars
7 attached together by screws ~~(12, 13)~~ whereby ~~the~~ a respective base
8 part ~~(12)~~ with the central steam inlet ~~(19)~~ is fixed between ~~the~~ a
9 spinning beam ~~(1)~~ and ~~the~~ an after-heater ~~(4)~~, and ~~that the a~~
10 distributor part ~~(13)~~ is also so connected by screws to the base
11 part ~~(12)~~ that it can be removed for cleaning.

1 7. (Currently Amended) The apparatus according to ~~characterized in that~~
2 ~~terized in that~~ wherein the pressure equalizing and labyrinth-
3 shaped distribution chamber ~~(14)~~ which follows a the single steam
4 inlet ~~(19)~~ is configured as a simple steam equalizing labyrinth
5 ~~(14)~~ which is formed first by the fixed and smooth walls of the
6 base bar, ~~(12)~~ second by ~~the~~ a fixed and smooth underside of the
7 spinning beam (1), and third and fourth by the cutouts ~~(15, 16)~~ in
8 the ~~mounted~~ distributor bar ~~(13)~~.

1 8. (New) An apparatus for steam misting a spun curtain
2 of filaments which comprises:

3 a spinning beam having rectangular nozzles from which a
4 curtain of filaments issues into a spinning chamber below said
5 nozzles, said nozzles being flanked by a pair of heating chambers;

6 a piping loop in one of said chambers for supplying
7 superheated steam brought to a spinning temperature by passage of
8 the steam through said loop;

9 an elongated steam distributor extending longitudinally
10 along a longitudinal side of said spinning chamber below said
11 nozzles and opening into said spinning chamber through a narrow
12 slot; and

13 a steam outlet bar defining with said elongated steam
14 distributor a distribution chamber wider than said slot and commu-
15 nicating with said slot along the length thereof, said steam outlet
16 bar having a single opening centrally of said outlet bar and said

17 steam distributor and receiving steam from said loop and discharg-
18 ing steam into said distribution